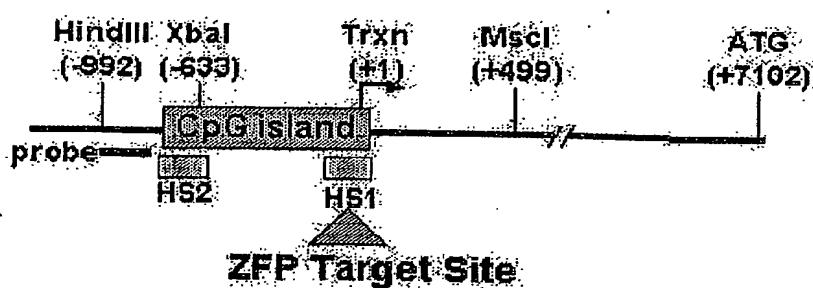
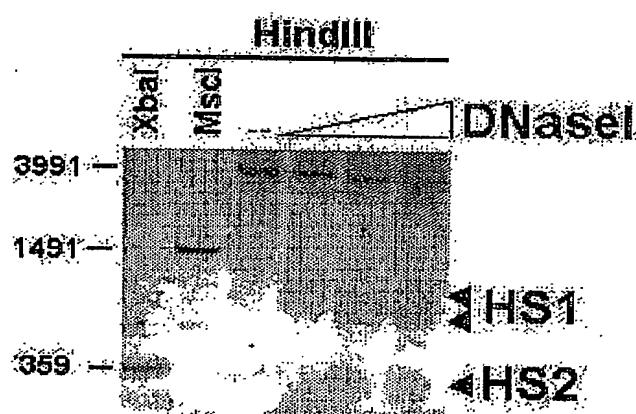
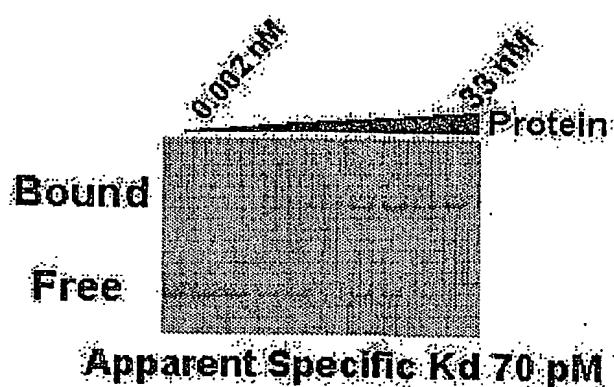


1/15

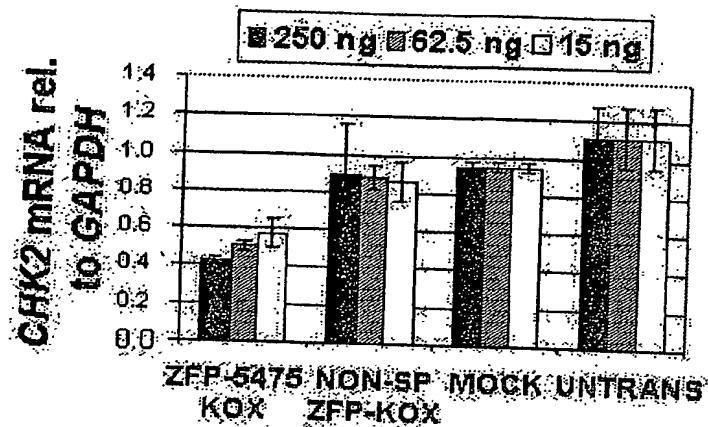
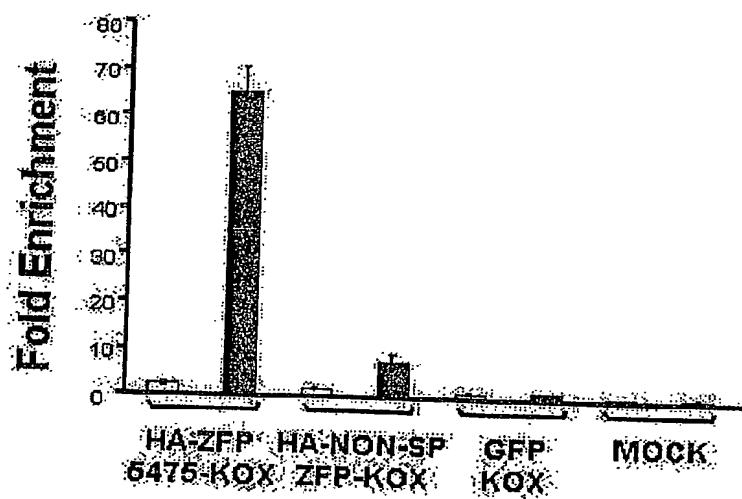
Fig. 1

A**B****C**

Best Available Copy

2/15

Fig. 2

A**B**

Best Available Copy

3/15

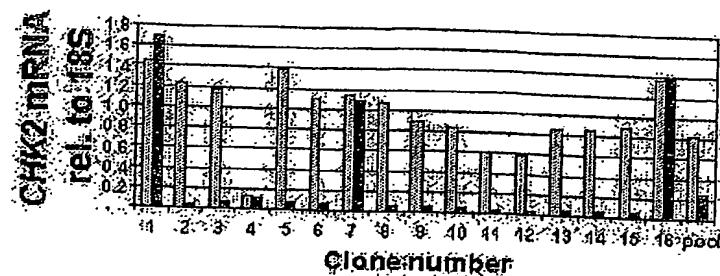
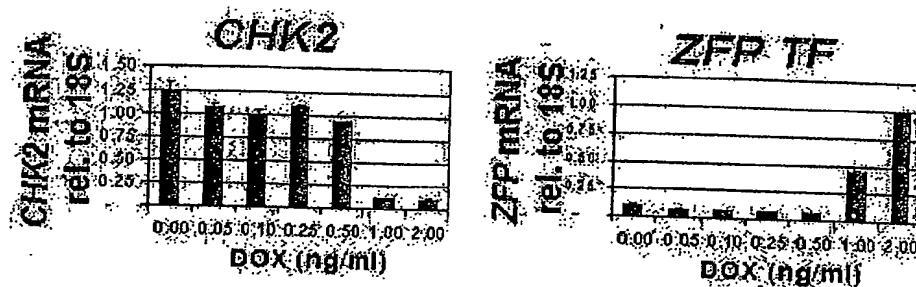
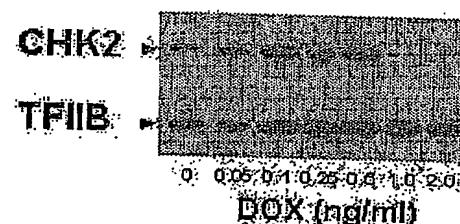
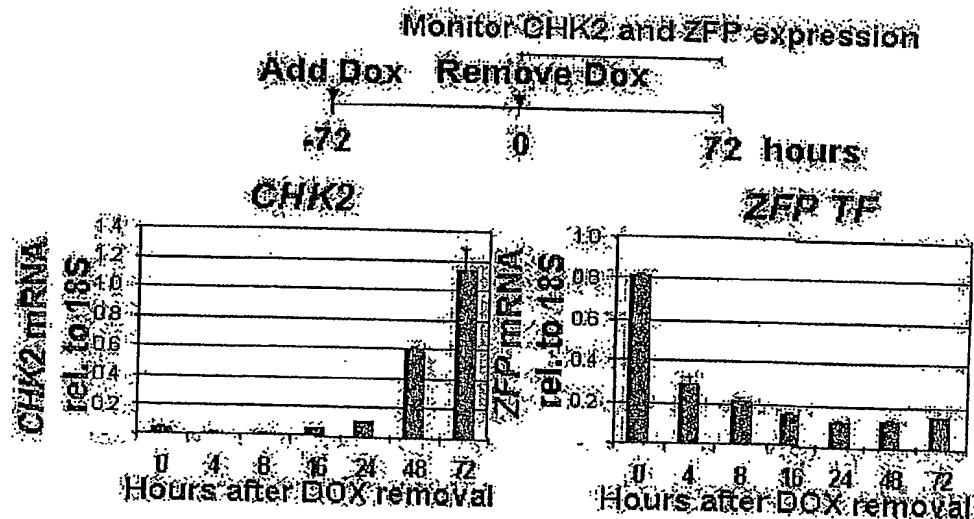
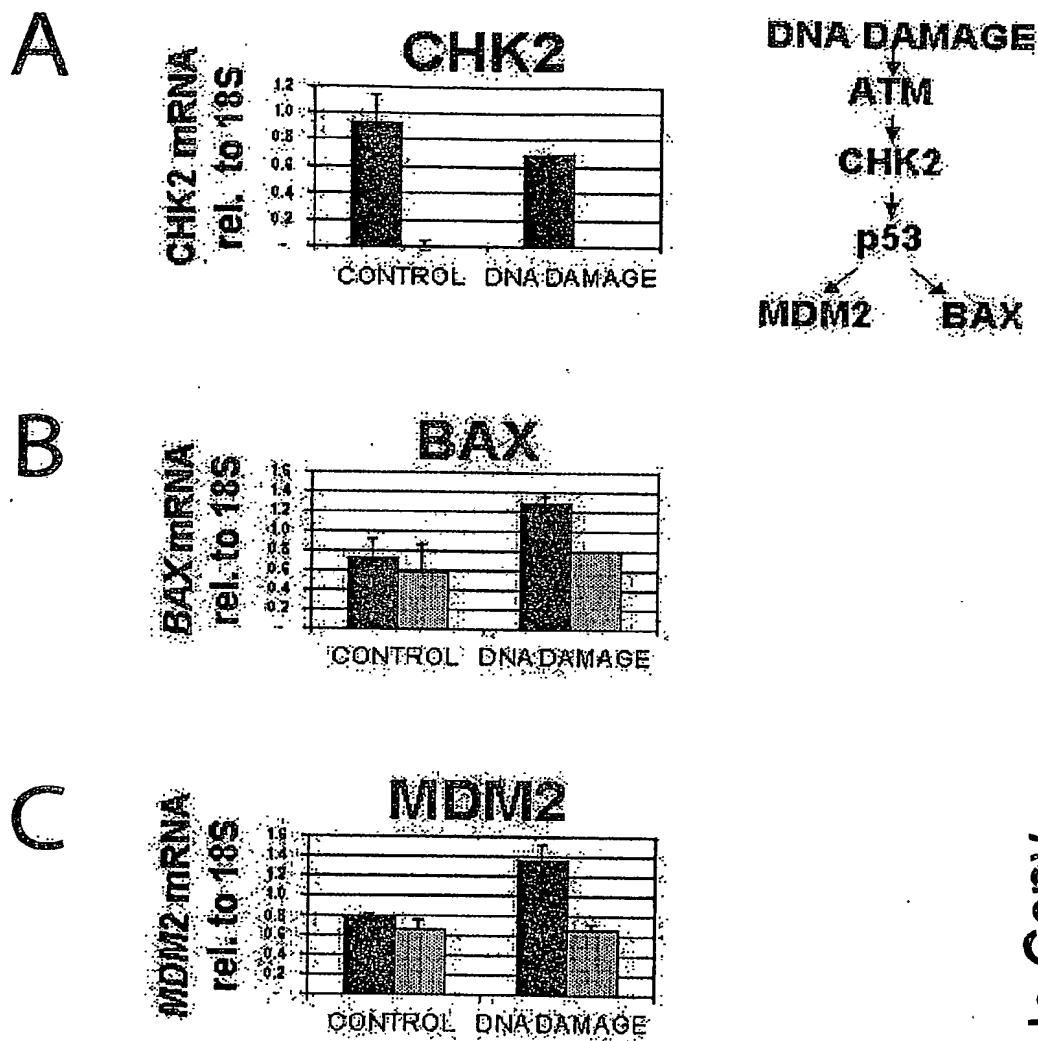
A**B****C****D**

Fig. 3

4/15

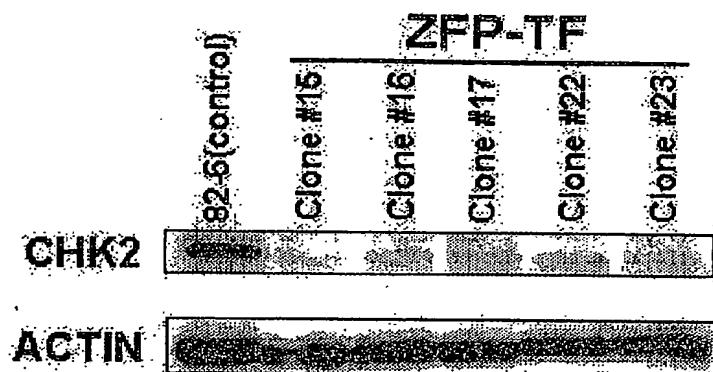
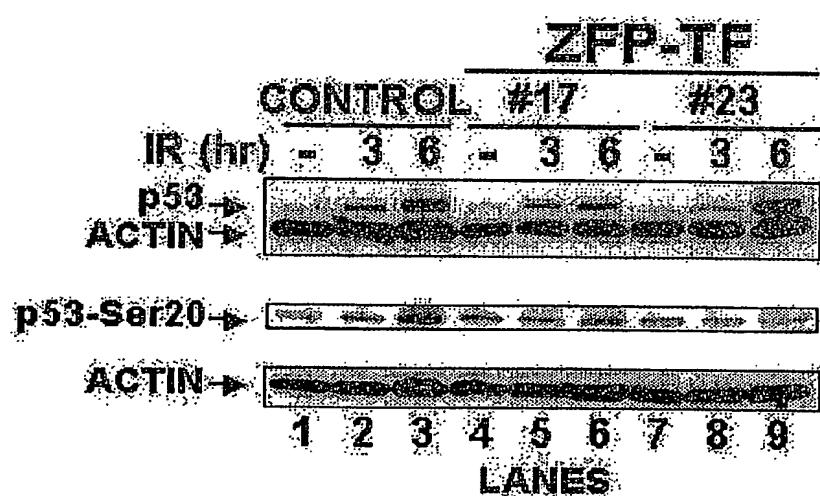
Fig. 4



Best Available Copy

5/15

Fig. 5

A**B**

Best Available Copy

6/15

FIGURE 6

MAERPFQCRICMRNFSRSDHLSRHIRTHTGEKPFACDICGRKFADNRDRTKHT
KIHTGGQRPYACPVESCDRRFSDRKTLIEHIRIHTGQKPFQCRICMRNFSTSSG
LSRHIRTHTGSQKPFQCRICMRNFSRSDHLSEHIRTHTGEKPFACDICGRKFAT
SSDRTKHTKIHLRQKDAARN

SEQ ID NO: 27

7/15

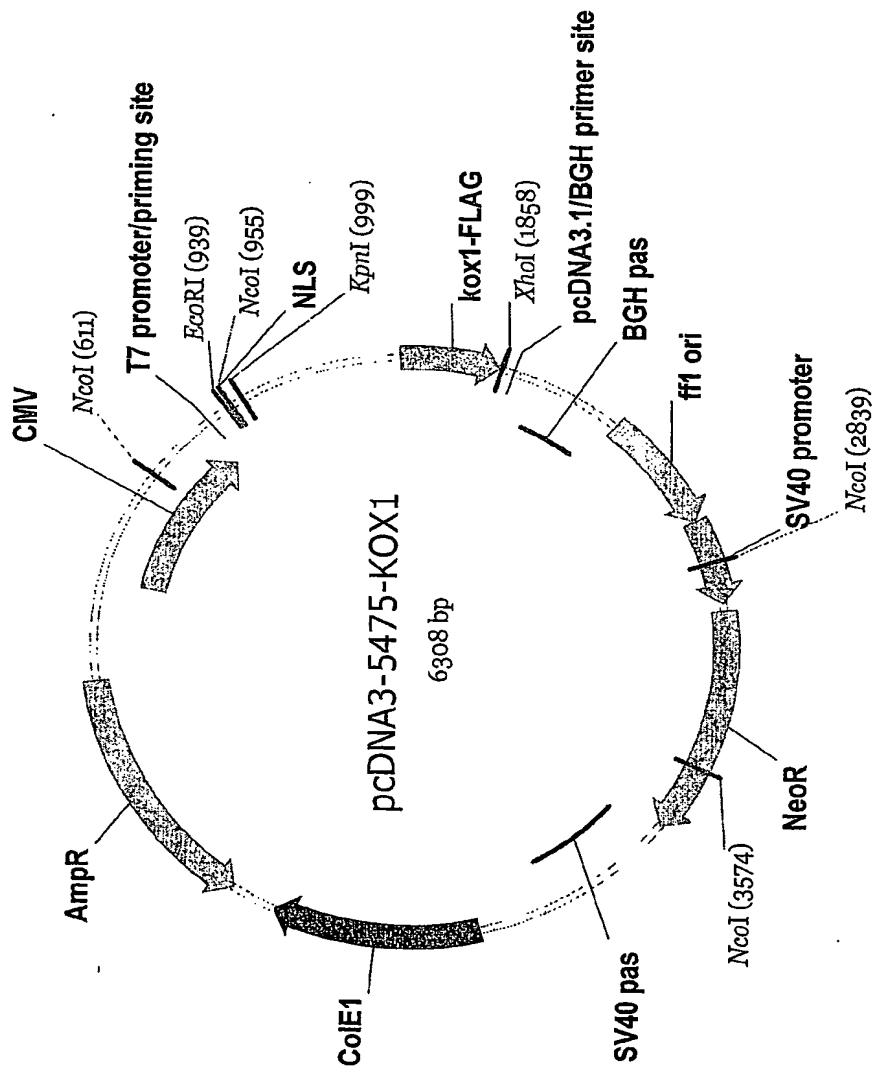
FIGURE 7

MAERPYACPVESCDRRFSTSADLTEHIRIHTGQKPFQCRICMRNFASANLSRHIRTHTGGERPF
QCRICMRNFSRSDALSTHIRTHTGEKPFACDICGRKFADRSTRTKHTKIHTGSQKPFQCRICMRN
FSRSDVLSAHIERTHTGEKPFACDICGKKFADRSNRRIKHTKIHLRQKDAAR

(SEQ ID NO: 53)

8/15

FIG. 8



9/15

FIG.9A

1 GACGGATCGG GAGATCTCCC GATCCCCAT TGCTCTGATG CCGCATAGTT
 CTGCTAGCC CTCTAGAGGG CTAGGGATA CCAGCTGAGA GTCATGTAG ACAGAGACTAC GGCGTATCAA
 71 AAGCAGTAT CTGCTCCCTG CTGTTGTTT GGAGGTGGCT GAGTAGTGC CGAGCAAAAT TAAAGCTACA
 TTGCGTCATA GACGAGGGAC GAACACACAA CCTCCAGCGA CTCATCACGC GCTCGTTTA AATTGATGT
 141 ACAAGGCAAG GCTTGACCGA CAATTCATG AAGAATCTGC TTAGGGTTAG GCCTTTCGG CTGCTTCGCG
 TGTTCGGTC CGAACCTGGCT GTTAACGTAC TTCTTAGACG AATCCAATC CGAAAACGC GACGAAGCGC
 211 ATGTAACGGGC CAGATATAGC CGTTGACATT GATTATGAC TAGTATATAA TAGTAATCAA TTACGGGTCA
 TACATGCCCG GTCTATATGC GCAACTGTAA CTAATAACTG ATCAATAATT ATCATATTAGT AATGCCCCAG
 281 ATTAGTTCAT AGCCCATATA TGGGTTCCG CGTTACATAA CTTACGGTAA ATGGCCGCC TGGCTGACCG
 TAATCAAGTA TCGGGTATAT ACCTCAAGGC GCAATGTATT GAATGCCATT TACCGGGGG ACCGACTGGC
 351 CCCAACGACC CCCGCCATT GACGTCATAA ATGACGTATG TTCCCATAGT AACGCCAATA GGGACTTCC
 GGGTGTGG GGGGGGAA CTGCAAGTT TACTGCATAC AAGGGTATCA TTGCGGTAT CCGTGAAGG
 421 ATTGACGTCA ATGGGGGAC TATTACGGT AAACCTGCCA CTTGGCAGTA CATCAAGTGT ATCATATGCC
 TAACTGGCAGT TACCCACCTG ATAATGCCA TTGACGGT GAACGTCAAT GTAGTTACACA TAGTATACGG
 491 AAGTACGCC CCTATTGACG TCAATGACGG TAAATGCCA GCCTGGCATT ATGCCAGTA CATGACCTTA
 TTCAATGCCGG GGATAACTGC AGTTACTGCC ATTACCGGG CGGACCGTAA TACGGGTAT GTACTGGAT NcoI
 ~~~~~~  
 561 TGGGACTTTC CTACTTGGCA GTACATCTAC GTATTAGTCA TCGCTATTAC CATGGTGTG CGGTGTTGGC  
 ACCCTGAAAG GATGAAACCGT CATGTTAGATG CATAATCAGT AGCGATAATG GTACCACTAC GCCAAACCG  
 631 AGTACATCAA TGGGGTGGAA TAGGGTTG ACTCACGGGG ATTCCAAGT CTCACCCCA TTGACGTCAA  
 TCATGTAGTT ACCCGCACT ATCGCCAAAC TGAGTGCCTC AAAATCAACG GAGCTTCA AAATGTCGTA ACAACTCCGC  
 701 TGGGAGTTG TTTGGCAAC AAAACCGTGG TTTIAGTGG CTCGAAAGT TTTACAGCAT TGTGAGGG  
 ACCCTCAAAAC AAAACCGTGG GAGCTTCA AAATGTCGTA ACAACTCCGC CCCATTGACG  
 771 CAAATGGGG CTTAGGGCTT ACGGTGGGAG GTCTATAAA GCAGAGCTCT CTTGGCTAAACT AGAGAACCCA  
 GTTIAACCGC CATCCGCACA TGCCACCCCTC CAGATATATT CGTCTCGAGA GACCGATTGA TCTCTGGGT  
 841 CTGCTTACTG GCTTATCGAA ATTAAATACGA CTCACATAG GGAGACCCAA GCTGGCTAGC GTTAAACTT  
 GACGAATGAC CGAATAGCTT TAATTATGCT GAGTGTATTC CCTCTGGGT CGACCGATCG CAAATTGAA  
 EcorI ~~~~~~  
 ~~~~~~ M A P K K R K V .

10/15

FIG.9B

911 AAGCTGATCC ACTAGTCCAG TGTGGTGGAA TTCGCTAGCG CCACCATGGC CCCAACAGAAG AAGAGGAAGG
TTCGACTAGG TGATCAGGTC ACACCACCTT AAGCGATCGC GGTGGTACCG GGGGTCTTC TTCTCCTTCC

KpnI

~~~~~

981 TGGGAATCGA TGGGGTACCC TTCCAGTGTG GAATCTGCAT GCGTAACCTTC AGTCGTAGTG ACCACCTGAG  
ACCCCTTAGCT ACCCCATGGG AAGGTACAG CTTAGACGTA CGCATTTGAAG TCAGCATCAC TGGTGGACTC  
· R H I R T H T G E K P F A C D I C G R K F A D

1051 CCGGCACATC CGCACCCACA CAGGGAGAA GCCTTTTIGCC TGTGACATT GTGGAGGAA ATTGGCCGAC  
GGCCGTGTAG GCGTGGGTGT GTCCGGCTCTT CGGAAAACGG ACACTGAAA CACCTCTT TAAACGGCTG  
N R D R T K H T K I H T G G Q R P Y A C P V E S

1121 AACCGGGACC GCACAAAGCA TACCAAGATA CACACGGGG GACAGGGGCC GTACGGATGC CCTGTGAGT  
TTGGCCCTGG CGTGTTCGTT ATGGTTCTAT GTGTGCCCGG CTGTGCCCGG CATGCGTAG GGACAGCTCA  
C D R R F S D R K T L I E H I R I H T G Q K P

1191 CCTGGGATCG CGCGTTTCT GACAGGAAGA CACTTATCGA GCATATCCGC ATCCACACCG GTCAGAACCC  
GGACGCTAGC GGGGAAAGA CTGTCCTCT GTGAATAGCT CGTATAGGC TAGGTGTGGC CAGTCTTCGG

F Q C R I C M R N F S T S G L S R H I R T H  
1261 CTTCCAGTGT CGAACATCTGCA TGGCTTAACCT CAGTACCGC AGCGGGCTGA GCCGCCACAT CGGCCAC  
GAAGGGTACA GCTTAGACGT ACGGATTGAA GTCATGGTCG TCGCCCGACT CGGGGGTGA GGGGGGGTGA  
T G S Q K P F Q C R I C M R N F S R S D H L S E

1331 ACAGGATCTC AGAAGGCCCTT CCAGTGTGCGA ATCTGCATGC GTAACCTCAG TCGTAGTGAAC CACCTGAGCG  
TGTCTAGAG TCTTCGGAA GGTCAACAGCT TAGACGTAAG CATTGAAGTC AGCATCACTG GTGGACTCGC  
H I R T H T G E K P F A C D I C G R K F A T S

1401 AACACATTG CACCCACACA GGGGAGAACG CTTTGCCTG TGACATTGT GGGAGGAAT TTGCCACACAG  
TTGTGTAAGC GTGGGGTGTG CCGCCTCTCG GAAACGGAC ACTGTAACAA CCCTCCCTTA AACGGGGTC  
S D R T K H T K I H L R Q K D A A R G S G M D

1471 CAGGGACCGC ACAAGGCATA CCAAGATACA OCTGGCCCAA AAAGATGCGG CCCGGGGATC CGGCATGGAT  
GTCGCTGGCG TGTTCGTAT GGTTCATGT GACGCGGGTT TTTTACGCC GGGCCCCTAG GCCGTACCTA  
A K S L T A W S R T L V T F K D V F T R E

1541 GCTAAAGTCAC TAACTGCCTG GTCCCGGACA CTGGTGACTT TCAAGGATGT ATTGTGGAC TTCACCAAGGG  
CGATTCACTG ATGACGGAC CAGGGCTGT GACCACTGGA AGTCACTACA TAAACACCTG AAGGGTCCC

## FIG.9C

1611 E W K L L D T A Q Q I V Y R N V M L E N Y K N  
 AGGAGTGGAA GCTGCTGGAC ACTGCTCAGC AGATCGTGT CAGAAATGTTG ATGCTGGAGA ACTATAAGAA  
 CCTCTACCTT CGACGACCTG TGACGAGTCG TCTAGCACAT GTCTTACAC TACGACCTTG TGATATTCTT  
 L V S L G Y Q L T K P D V I L R I E K G E E P  
 CCTGGTTTCC TTGGGTTATC AGCTTAAGTAA GCCAGATGTTG ATCCCTCCGGT TGGAGAAGGG AGAAGAGCCC  
 GGACCAAAGG AACCCAAATAG TCGGATGATT CGGTCTACAC TAGGAGGCCA ACCTCTTCCC TCTTCTCGGG  
 W L V E R E I H Q E T H P D S E T A F E I K S S  
 TGGCTGGTGG AGAGAGAAAT TCACCAAGAG ACCCATCTG ATTCAAGAGAC TGCATTGGAA ATCAAATCAT  
 ACCGACCACC TCTCTCTTTA AGTGTCTCTC TGGTAGGAC TAAGTCTG ACGTAAACTT TAGTTAGTA

~~~~~  
XbaI

1821 CAGTGACTA CAAGGACGAC GATGACAAGT AAGCTTCTCG AGTCATGCTA GAGGGCCGT TTAAACCCGC
 GTCAACTGAT GTTCCTGCTG CTACTGTTCA TTGGAAGAGC TCAGATCGAT CTCCCCGGCA AATTGGCG
 1891 TGATCAGCCT CGACTGTGCC TTCTAGTGC CAGCCATCTG TTGTTGCGC CTTCTCTTGA
 ACTAGTCGGA GGTGACAGG AAGATCAACG GTGGGTAGAC AACAAACGGG GAGGGGGCAC GGAAGGAACCT
 1961 CCCTGGAAAG TGCCCACTCCC ACTGTCCCTT CCTAATAAA TGAGGAAATT GCATCGCATT GTCTGAGTAG
 GGGACCTTCC ACGGTGAGGG TGACAGAAA GGATTATTTC ACTCTTTAA CGTAGCGTAA CAGACTCATC
 2031 GTGTCATTCT ATTCTGGGG GTGGGGTGGG GCAGGACAGC AAGGGGGAGG ATTGGGAAAGA CAATAGCAGG
 CACAGTAAGA TAAGCCCC CACCCCAACCC CGTCCCTGTC TTCCCCCTTC TAACCCCTTCT GTTATCGTCC
 2101 CATGCTGGG ATGCGGTGG CTCTATGGCT TCTGAGGGG AAAGAACAG CTGGGGCTC AGGGGTATC
 GTACGACCCC TAGGCCACCC GAGATACCGA AGACTCCGCC TTTCCTGGTC GACCCCGAGA TCCCCCATAG
 2171 CCCACGCGCC CTGTAGCGGC GCATTAAGCG CGGGGGGTGT GGTGGTTACG CGCAGCGTGA CGCGTACACT
 GGGTGGCGGG GACATCGCC CGTAATTGCG GCCGCCCACA CCACCAATGC GCGTGGCAGT GGCGATGTGA
 2241 TGCCAGGCC CTAGGCCCG CTCCCTTCGC TTCTCTCCCT CCCTTCTCG CCACGTTCTGC CGGTTTCCC
 ACGGTGGCGG GATCGGGGC GAGGAAAGCG AAAGAAGGA AGGAAGAGC GTGGCAAGGC CGCGAAAGGG
 2311 CGTCAAAGCTC TAAATGGGG CATCCCTTA GGGTTCCGAT TTAGTGCCTT AGGGCACCTC GACCCAAAA
 GCAGTCCGAG ATTAGCCCC GTAGGGAAAT CCCAAGGCTA AATCACGAAA TGCCTGGAG CTGGGGTTT
 2381 AACTTGATTA GGGTGTGTT TCACGTAGTG GGCCATCGCC CTGATAGACG GACTATCTGC CAAAAGGG GAAACTGCAA
 TTGAACTAAT CCCACTACCA AGTGCATCAC CGGTAGGG GAAACTGCAA
 2451 GGAGTCCACG TTCTTTAATA GTGGACTCTT GTTCCAAACT GAAACAAAC TCAACCCTAT CTCGGTCTAT

12/15

FIG. 9D

CCTCAGGTGC AAGAAATTAT CACCTGAGAA CAAGGTTGA CCTTGGCTATT AGTGGGTG AGTCAGATA
 2521 TCTTTGATT TATAAGGAT TTGGGGATT TCGGCCTATT GGTAAAGAA TGAGCTGATT TAACAAAAAT
 AGAAAACCAA ATATTCCCTA AAACCCCTAA AGCCGGATAA CCAATTCTT ACTCGACTAA ATTGTTTA
 2591 TTAACGCAGA TAAATTCTGT GGAATGTGTG TCAGTGTAGG TGTGAAAGT CCCAGGCTC CCCAGGCAGG
 AATTGGCCTT ATTAAGACA CCTTACACAC AGTCAATCCC ACACCTTCA GGGTCCGAG GGGTCCGTC
 2661 CAGAAGTATG CAAAGCATGC ATCTCAATT GTCAACC ACCAGAACCA AGTGTGGAA AGTCCCCAGG CTCCCCAGCA
 GTCTCTATAC GTTTCGTCAG TAGAGTTAAT CAGTCGTGG TCCACACCTT TCAGGGTCC GAGGGTGTG
 2731 GGCAGAAAGTA TGCAAAAGCAT GCATCTCAAT TAGTCAGCAA CCATAGTCCC GCCCCTAACT CGGCCATCC
 CCGTCTTCAT ACGTTTCGTA CGTAGAGTTA ATCAGTCGTT GGTATCAGGG CGGGGATTGA GGCGGTAGG

NcoI

~~~~~

2801 CGCCCTAAC TCCGCCCTAGT TCCGCCATT CTCCGCCATT TGGCTGACTA ATTTCCTTAA TTATGCGA  
 GGGGGATTG AGGGGGTCA AGGGGGTAA GAGGGGGGT AGCGACTGAT TAAAGAAAT AAATACGTCT  
 2871 GGGCGAGGCC GGGCTCTGGCT CTGAGCTATT CCAGAAGTAG TGAGGGGT CCTAGGCTTT  
 CGGGCTCCGG CGGAGACCGA GACTCGATAA GGTCTTCATC ACTCCCTCGA AAAACCTTC GGATCCGAAA  
 2941 TGCAAAAGC TCCCCTGGAGC TTGTATATCC ATTTCCTGGAT CTGATCAAGA GACAGGATGA GGATCGTTTC  
 ACGTTTTTCG AGGGCCCTCG AACATATAGG TAAAGCCCTA GACTAGTCTT CTGTCCTACT CCTAGCAAAG  
 3011 GCATGATTGA ACAAGATGGA TTGCACCGAG GTTCTCCGGC CGCTTGGGT GAGAGGTAT TCGGCTATGA  
 CGTACTAACT TGTCTTACT AACGTGCGTC CAAAGGGCG GCGAACCCAC CTCTCCGATA AGCCGATACT  
 3081 CTGGCACAA CAGACAATCG GTCGCTCTGA TGCCGCCGTG TTCCGGTGT CAGGCCAGGG GGCCTGGTT  
 GACCCGTGTT GTCTGTGAGC CGACCGAGCT ACCGGGGCAC AAGGGGACA GTGCCGGTCC CGGGGCCAA  
 3151 CTTTGTCA AGACCGACT GTCCGGTGGC CTGAATGAAC TGCAGGACGA GGCAGCGGG CTATCGGGC  
 GAAAACAGT TCTGGCTGGA CAGGCCACGG GACTTACTTG ACGTCTCTGCT CGTCTGGCC GATAGCACCG  
 3221 TGGCCACGAC GGGCGTTCTC TGGCAGCTG TGCTCGACGT TGTCACTGAA GGGGAAAGGG ACTGGCTGCT  
 ACCGGTGTG CCGCAAGGA ACGGGTGGAC ACGAGCTGCA ACAGTGAATT CGCCCTTCCTC TGACCGACGA  
 3291 ATGGGGAA GTGCCGGGG AGGATCTCCT GTCATCTCAC CTTGGCTCTG CCGAGAAAGT ATCCATCATG  
 TAACCCGCTT CACGGCCCCG TCCTAGAGGA CAGTAGAGTG GAACGAGGAC GGCTCTTICA TAGGTAGTAC  
 3361 GCTGATGCCA TGGGGGGCT GCATAGCTT GATCCGGCTA CCTGCCATT CGACCAACAA GCGAAZACATC  
 CGACTACGTT AGGCCGCCA CGTATGGCAA CTAGGCCGAT GGACGGTAA GCTGGTGGTT CGCTTGTGAG  
 3431 GCATCGAGCG AGCACGTTACT CGGATGGAAG CCGGTCTTGT CGATOAGGAT GATCTGGACG AAGAGCATCA  
 CGTAGCTCGC TCGTGCATGA GCCTACCTTC GGCAGAAACA GCTAGCTCTA CTAGACCTGC TTCTCGTAGT

13/15

## FIG.9E

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3501 | GGGGCTCGCG CCAGCGAAC TGTCGCCAG GCTCAAGGGG CGCATGCCG ACGGGAGGA TCTCGTGTG<br>CCCCGAGCGC GGTCGGCTG ACAAGGGCTG CGAGTCCGC CGTACGGGC TGGCGCTCT AGAGGACAC<br>NcoI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 3571 | ~~~~~ ACCCATGGCG ATGCCTGCTT GCCGAATAATC ATGGGGAAA ATGGCCGCTT TTCTGGATTC ATCGACTGTG<br>3641 TGGGTACCGC TAGGGACGAA CGGGCTTATAG TACCACTTT TACCGGGCAA AAGACCTAAG TAGCTGACAC<br>CGGGCGTGGG TGTGGGGAC CGCTATCAGG ACATAGCGTT GGCTACCGT GATATTGCTG AAGAGCTTGG<br>CGGCCGACCC ACACCGCTG GCGATAGTCC TGTATCGCAA CCGATGGCA CTATAACGAC TTCTCGAAACC<br>3711 CGGGCAATGG GCTGACCGCT TCCCTGCGCT TIACTGGTATC GCGCTCCCG ATTGCGAGGG CATGCCCTTC<br>GCCGCTTAC CGACTGGCGA AGGAGCACGA AATGCCATAG CGGCGAGGGC TAAGCGTGC GTAGCGGAAG<br>3781 TATGCCCTTC TTGACGAGTT CTTCCTGAGCG GGACTCTGGG GTTCAAAATG ACCGACCAAG CGACGCCAA<br>ATAGGGGAAG AACTGCTCAA GAAGACTCGC CCTGAGACCC CAAGCTTAC TGGCTGGTTC GCTGCGGGTT<br>3851 CCTGCCATCA CGAGATTTCG ATTCCACCGC CGCCTCTAT GAAAGGTTGG GCTTCGGAAAT CGTTTCCGG<br>GGACGGTAGT GCTCTAACGC TAAGGGGGC GCGGAAGATA CTTTCACACC CGAACAGCCTTA GCAAAAGGCC<br>3921 GACGGGGCT GGATGATCTT CCAGGGGG GATCTCATGC TGGAGTCTT CGGCCACCCC AACTGTTTA<br>CTGGGGCGA CCTACTAGGA GGTGGGGCC CTAGAGTACG ACCCTAAGAA GCGGGTGGG TTGACAATAAT<br>3991 TTGCAAGCTTA TAATGGTTAC AAATAAAGCA ATAGCATAC AAATTCAAAATAAAGCAT TTTTTCACT<br>AACGTGCGAAT ATTACCAATG TTATTTCGT TATCGTAGTG TTAAGTGT TTATTTCGTA AAAAAGTGA<br>4061 GCATTCTAGT TGTGGTTGT CCAAACCTAT CAATGTATCT TATCATGTCT GTATACCGTC GACCTCTAGC<br>CGTAAGATCA ACACCAACA GGTGAGTA GTTACATAGA ATAGTACAGA CATATGGCAG CTGGAGATCG<br>4131 TAGAGCTGG CGTAATCTG GTCACTAGCTG TTTCCTGTT GAAATTGTTA TCCGCTCACA ATTCCACACA<br>ATCTCGAACC GCATTAGTAC CAGTATCGAC AAAGGACACA CTTTAACAT AGGGCAGTGT TAAGGTTGT<br>4201 ACATCGAGC CGGAAGCATA AAGTGTAAAG CTTGGGGTC CTAATGAGTC AGCTAACTCA CATTAAATTC<br>TGTATGCTCG GCCTTCGTAT TTCACTATT GCACCCACG GATTACTCAC TCGATTGAGT GTAATTAAACG<br>4271 GTTGGCTCA CTGGCCGCTT TCCAGTCGGG AACCTGTGC TGCCAGCTGC ATTAATGAT CGGCCAACGC<br>CAACGGAGT GACGGGGCAA AGGTAGGCC TTTGGACAGC ACGGTCGAGC TAATTACTTA GCGGGTTGCG<br>4341 GCGGGAGAG GGGGTTGGG TATTGGGGC TCTTCGGCTT CCTCGCTCAC TGACTCGCTG CGCTCGGTG<br>CGCCCTCTC CGCCAAACGC ATAACCCGCG AGAAGGGAA GGAGCGAGTG ACTGAGCGAC GCGAGCCAGC<br>4411 TTGGGTGCG GCGAGCGGTA TCAGCTCACT CAAAGGGGT AATAACGGTTA TCCACAGAAT CAGGGGATAA<br>AAGCCGACGC CGCTCGCCAT AGTCCAGTGA GTTTCGGCCA TTATGCCAAT AGGTGTCITA GTCCCCATT<br>4481 CGCAGGAAAG AACATGTGAG CAAAGGCCA GAAAAGCGTA AAAAGGCCG AGGAACCGTA AAAAGGCCG GTTGTGGCG |

14/15

FIG. 9E

15/15

## FIG.9G

5601 AGTTTGGCA ACAGTTGTGC CATTGCTACA GGCATCGTGG TGTACAGCTC GTTCAGCTC ATGGCTTGTT ATGGCTTCAT  
 TCAAACCGT TGCAACAAACG GTAACGATGT CGCTAGCACCC ACAGTGCAG CAGCAAACCA TACCGAAGTA  
 5671 TCAGCTCCGG TTCCCCAACGA TCAAGGGAGAG TTACATGATC CCCCATGTTG TGCAAAAAAG CGGTTAGCTC  
 AGTCGAGGCC AAGGGTTGCT AGTTCCGCTC ATAGTACTAG GGGGTACAAC ACGTTTTTC GCCAATCGAG  
 5741 CTTCGGTCTT CGATCGTGT TCAGAAGTAA GTGGGCCGA GTGTTATCAC TCATGGTTAT GGCAAGCACTG  
 GAAGCCAGGA GGCTAGAAC AGTCTTCATT CAACCGGGGT CACAATAATGG AGTACCAATA CCGTCGTGAC  
 5811 CATAATTCTC TTACTGTCA GCCATCCGTA AGATGCTTT CTGTAAGCTGG TGAGTACTCA ACCAAGTCA  
 GTATTAGAG ATGACAGTA CGGTAGGCAT TCTACGAAA GACACTGACC ACTCATGAGT TGGTTCAAGTA  
 5881 TCTGAGAATA GTGTATGCCG CGACCGAGTT GCTCTTGCCC GGCGCTCAATA CGGGATAATA CGGGCCACAA  
 AGACTCTTACATACGGC GCTGGCTCAA CGAGAACGGG CGCAGTTAT GGCCTATTAT GGCCTATTAT  
 5951 TAGCAGAACT TAAAGTGC TCATCATTGG AAAACGTTCT CGGGGGGAA AACTCTCAAG GATCTTACCG  
 ATCGTCTGA ATTTCACG AGTAGTAACC TTTTGCAGA AGCCCCGGCTT TGAGAGTCT CTAGAATGGC  
 6021 CTGTTGAGAT CCAAGTTCGAT GAAACCCACT CGTGGCACCA ACTGATCTTC AGCATCTTT ACTTTCAACCA  
 GACAACTCTA GGTCAAGCTA CATTGGTGA GCACGTGGGT TGACTAGAAG TGAAAGTGGT  
 6091 GCGTTCTGG GTGAGCAAA ACAGGAAGGC AAAATGCCGC AAAAAGGGA ATAAGGGGA CACGGAAATG  
 CGCAAAGACC CACTCGTT TGCCCTTCGG TTTTACGGG TTTTTCCCT TATTCCCGCT GTGCCCTTAC  
 6161 TTGAATACTC ATACTCTTC TTTTCAATA TTATTGAAGC ATTATCAGG GTTATTGTCT CATGAGCGGA  
 AACTTATGAG TATGAGAAGG AAAAGTTAT ATAACACTCG TAAATAGTCC CAATAACAGA GTACTCGCCT  
 6231 TACATATTG ATGTTATTA GAAAATAAA CAATAAGGGG TTCCGGCAC ATTTCGGCAC AAAGTGCCAC  
 ATGATAAAC TACATAAAAT CTTTTATTG GTTATCCCCC AAGGGCGGTG TAAAGGGGT TTTCAAGGGT  
 6301 CTGACGTC  
 GACTGCAG